

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
690 Walnut Ave.St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 1.28**WELDING INSPECTION REPORT****Resident Engineer:** Casey, William**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-026678**Date Inspected:** 09-Nov-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job Site**CWI Name:** As noted below.**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG Component**Summary of Items Observed:**

Quality Assurance Inspector (QA) William Clifford was at the American Bridge/Fluor (ABF) job site at Yerba Buena Island in California between the times noted above in order to monitor Quality Control functions and the in process work being performed by ABF personnel. The following items were observed:

12E/13E Stiffeners

This QA observed, at random intervals, ABF/JV qualified welder Fred Kaddu #2188 performing Shielded Metal Arc Welding (SMAW) with 1/8" diameter E9018-MH4-R electrode and implementing Caltrans approved Welding Procedure Specification (WPS) ABF-WPS-D15-1012-3. The joint being welded was a 35mm thick internal longitudinal stiffener butt splice designated as LS#4 on the underside of the "A" deck plate, 12E/13E segment splice location.

During welding, ABF Quality Control (QC) John Pagliero was noted monitoring the welding parameters. Welding parameters were recorded as (A=130).

The work performed at this location is per criteria set in Request For Information (RFI2616R0) for the correction of stiffener misalignment in excess of 10mm. Upon completion, the weld is to be ground in such a way as to achieve a "4 to 1" transition between to two misaligned components. Weld transition is to be verified at the completion of welding process.

13W/14W "D" Plate

This QA performed a planar alignment survey of the 13W/14W "D" bottom plate butt joint (B-U2-S). Off-set measurements were taken with the Bridge Cam Gauge placed on the 13W portion of the connection.

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(+) indicates that 14W was recorded as being higher than 13W.

(-) indicates that 14W was recorded as being lower than 13W.

All measurements were taken as close as possible to the area directly centered between the adjacent open ribs.

Due to a plate thickness mis-match of 5mm, up to 8mm misalignment is allowed at this joint. Please see attached sketches for details of survey on 13W/14W.

13W/14W "H" Plate

This QA performed a preliminary planar alignment survey of the 13W/14W "H" diagonal plate butt joint (B-U2-GF). Initial readings indicate at the area within 90mm of the "D" plate / "H" plate interface the off-set has been measured to range from approximately 8~10mm. This joint fit up is in progress and this QA will re-measure the out of compliance area once it has received final acceptance from QC.

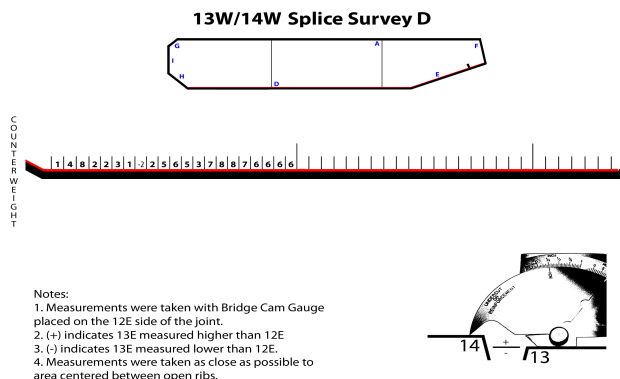
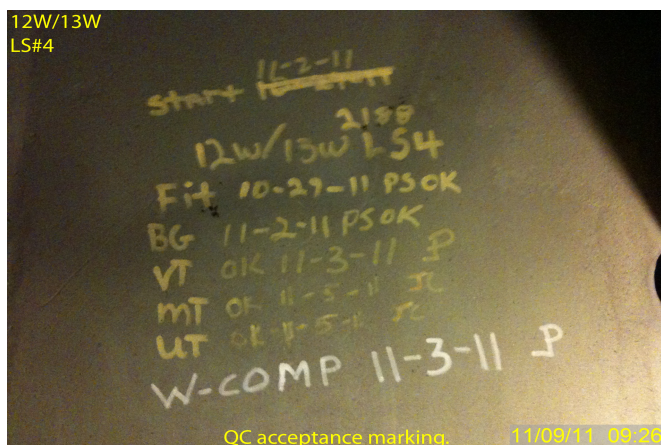
Ultrasonic Testing

This QA Inspector performed Ultrasonic Testing (UT) of approximately 100% of the area previously tested by QC Ultrasonic technicians. The joint is a Complete Joint Penetration (CJP) welded by Fred Kaddu #2188 utilizing the Shielded Metal Arc Welding (SMAW) with 1/8" diameter E9018-MH4-R electrode and implementing Caltrans approved Welding Procedure Specification (WPS) ABF-WPS-D15-1012-3. The joints welded were internal longitudinal stiffener butt splices designated as LS#4 and LS#6 on the underside of the "A" deck plate, 12W/13W segment splice location.

This QA observed no rejectable indications at the time of testing. This QA Inspector generated a TL-6027 UT report on this date. The completed work observed at this location appeared to be in compliance with the contract specifications.

This QA verbally informed QA SPCM Lead, Daniel Reyes, of the issues noted in this report for compliance. For further details of issues of significance see QA SPCM Lead, Daniel Reyes, "Daily Inspection Report" (TL-6031) submitted for this date.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



**Not To Scale

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Summary of Conversations:

No relevant conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact SMR Nina Choy (510) 385-5910, who represents the Office of Structural Materials for your project.

Inspected By:	Clifford, William
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Quality Assurance Inspector

Reviewed By:	Levell, Bill
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QA Reviewer
